4.12 NOISE

The noise analysis considers A-weighted and C-weighted noise resulting from military operations, transportation and construction activities, aviation, and the impulsive noise from the use of high explosives. Additional specific information on noise and its assessment methods was presented in Appendix F.

4.12.1 Alternative 1

 Under Alternative 1, potential military activities on McGregor Range would provide continued support to overall mission requirements at Fort Bliss. These activities could range from a continuation of activities at their current level (maintenance of the *status quo*) to an increase in the level of use and possibly the introduction of varied new activities (see Section 2.1.1, *Military Activities on Withdrawn Lands*).

Current missions that would continue include: missile firings, fixed- and rotary-wing aviation flight and air-to-ground training, major joint combined forces exercises, laser operations, and small arms training. Potentially expanded or new activities include: expanded missile firings from new sites, additional fixed- and rotary-wing aviation activity which would expand air-to-ground training, construction of new roads and facilities to support training, and increased support for brigade-size Heavy Division training exercises.

If mission activities continue at current levels, those with the potential to create some noise involve ongoing activities in the training areas and continued missile firings. However, these specific activities are sporadic, highly transient, and of relatively short duration. Therefore, aviation-related noise on McGregor Range is considered to remain the dominant noise source influencing the acoustic environment. At current activity levels, noise resulting from aircraft operations results in a uniformly distributed noise level of L_{dnnr} 43 and 40 on north and south McGregor, respectively, and L_{dnnr} 44 on the two areas combined (Lucas and Calamia, 1994). Noise levels resulting at specific locations throughout the McGregor Range area were shown in Table 3.12-3, and ranged from L_{dnnr} 35 to L_{dnnr} 52. All of these noise levels remain within the confines of the restricted airspace. Furthermore, all noise levels are well below the Noise Zone II threshold (L_{dnnr} 65).

Although detailed operational data on potentially expanded aviation activities are not available, it is still possible to assess the potential capacity of specific airspace elements to accommodate increased operations while still remaining at or below a given noise threshold. If aviation activities are assumed to continue using the same relative combination of aircraft, it is possible to mathematically scale the number of current operations producing a known noise level to an increased noise level. This scaling provides a multiplier that can be used to assess the capacity of the airspace to support an expanded level of operations. Application of this process to the restricted airspace over McGregor Range indicates that operations could be expanded by a factor of 6.3 and 7.9 on RA5103B/C and RA5103A/D, respectively, and still not exceed a noise level of L_{dnmr} 55.

A proposal that has the potential to create noise impacts on McGregor Range involves the proposed expansion of GAF activities at HAFB. If a new air-to-ground training range is constructed on Otero Mesa on McGregor Range, localized noise increases would occur in the immediate vicinity of the air-to-ground training range. Noise levels directly over the targets would reach L_{dnmr} 80. However, at other locations on McGregor Range, away from the air-to-ground range, noise would be significantly less (USAF, 1998). Since this noise is localized on a training range, and does not extend past the boundaries of the restricted airspace, no land use incompatibilities would result. Therefore, this elevated noise is not considered to be significant.

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Another potential use would develop a helicopter training range. To assess this, a hypothetical 12.4- by 12.4-mile geographic area was described for use by the MR_NMAP noise model. The Kiowa Warrior (OH-53D) and Longbow (Apache) (AH-64D) were modeled in this airspace. Each type of aircraft flew 600 annual sorties, with one-half being day sorties and one-half being night. The resultant uniformly distributed noise level was L_{dnmr} 49. If the same capacity assessment described above were performed for this scenario, the total 1,200 annual sorties modeled could be increased by a factor of approximately 4, and still not exceed L_{dnmr} 55.

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Other expanded uses of McGregor Range would include the designation of additional controlled access FTX. However, the noise associated with these operations would remain dispersed and transitory. Noise associated with these sources would be compatible with existing land uses (weapons range), and no elevated noise levels would be expected to occur outside of McGregor Range boundaries.

Potential increases in unit training, which could include developing a Heavy Division and National Guard training center, would also increase noise levels. However, these noise levels would be transient, dispersed, and would only occur during the period of each individual unit's training. Noise sources would be localized within TA 8 on McGregor Range, which is already used for this type of training, and elevated noise levels would not be expected to occur beyond McGregor Range boundaries.

Some facility construction and demolition would also be expected to occur under this alternative. However, noise associated with these activities would be localized, temporary in nature, and of relatively short duration. Operation of heavy vehicles around construction and/or demolition sites would probably be the greatest noise source, and this would not be significant.

Nonmilitary uses of McGregor Range would continue to support multiple use objectives. Levels of nonmilitary use would be expected to remain at current levels, and would not create any significant noise impacts.

4.12.2 Alternative 2

Under Alternative 2, some of the extreme northern portions of McGregor Range would be proposed for return to public use. Although some ground areas would no longer be available for military use, the lateral boundaries of the restricted airspace are proposed to remain unchanged. Therefore, those aviation activities described in Section 4.12.1 would occur, and aircraft-related noise levels would be as described above. In general, military uses of the range would be as described for Alternative 1, with the exception of some constraints on Patriot missile firings due to some reduction in lands available for SDZs, and the need to discontinue dismounted training exercises in the Sacramento Mountains foothills. However, these alterations are not expected to significantly alter the regional acoustic environment.

 Due to the projected ultimate return of some lands to BLM management, some nonmilitary land uses would be expected to change. In addition to grazing, the nonwithdrawn lands may reasonably be expected to provide the potential for increased recreation and provide opportunities for exploration and possible extraction of mineral resources. The extent of these potential activities is not sufficiently defined at this time to assess noise impacts that may result. BLM management policies could influence recreation-related noise. Possible noise resulting from any mining proposals (e.g., blasting, rock crushing, etc.) would be assessed by the proponent of the proposed mining operation at the time of proposal submission.

4.12.3 Alternative 3

Under Alternative 3, the lateral boundaries of the restricted airspace are not proposed to change. Therefore, in general, noise related to both fixed- and rotary-wing aircraft would remain generally as discussed in Section 4.12.1. However, some air defense test programs would have to be modified or curtailed. Another notable exception involves the possible expanded air-to-ground training proposed to be conducted by the USAF operating from HAFB. Since Otero Mesa would be returned to public use under this alternative, the possibility of developing a new range in that location would no longer exist. Therefore, the elevated noise levels that would be localized in that area were the range to be sited there would not occur. Furthermore, since the land area potentially available to provide SDZs for missile firings becomes less and less available, these firings become more and more directionally constrained resulting in less dispersion of that noise.

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With the reduced geographic area available for other possible ground training activities on McGregor Range, potential noise from these sources is either significantly reduced, or entirely eliminated. For example, training for some JTXs, and operations from some controlled access FTX sites would no longer be possible.

Anticipated nonmilitary activities on the lands returned to the public domain would be as described in Section 4.12.2. Potential noise sources would be associated with increased access, expanded recreational activities, and opportunities for mineral exploration and extraction.

4.12.4 Alternative 4

Under Alternative 4, additional lands in the northern portion of McGregor Range would be returned for public use. In general, while live firing of missiles could continue, the potential launch points would be limited and the possible trajectories of these weapons would be severely constrained. Noise from missile firings would continue to be random and of very short duration, but would be localized into fewer areas and would be more concentrated in limited firing corridors.

 While the lateral boundaries of the restricted airspace are not forecast to change, some aviation training and air defense test programs will be modified, or completely curtailed. Aviation noise in general will remain as described in Section 4.12.1. However, some aspects of training that resulted in localized elevated noise levels would be changed. For example, the current Class C Bombing Range in the northern portion of McGregor Range would no longer be available, and aerial gunnery would be limited to a small portion of Tularosa Basin.

4.12.5 Alternative 5 – No Action

 Under the No Action Alternative, the lateral boundaries of the restricted airspace are not forecast to change, and air-to-air training activities could continue to be conducted in this region. Under this alternative, aircraft noise would not be expected to exceed current levels (L_{dnnr} 40 to 44), and would probably be less, since some current aviation noise results from aircraft supporting other McGregor Range activities. All air-to-ground, ground-to-ground, and ground-to-air activities on McGregor Range would cease, thus eliminating noise from these sources. Nonmilitary activities would be based on future determined land uses.

4.12.6 Alternative 6

Alternative 6 would result in changes in designation for some special land use categories presently on McGregor Range. These differing land use designations could result in some shifting and alteration of

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range activities that could modify patterns and sources of noise. While this alternative requires congressional action for implementation, it is assumed that management practices associated with the NCA would be similar to those currently under the RMPA. Because the precise nature and extent of the congressional action cannot be determined at this time, detailed noise analysis of this alternative is deferred until the proposal is specified for this type of nonmilitary withdrawal by the DOI.

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4.12.7 Cumulative Impacts

No significantly adverse cumulative noise impacts would be expected to occur.

Under Alternatives 1, 2, 3, and 4, McGregor Range is an integral component of military activities conducted by Fort Bliss. As such, it comprises one element of a military complex consisting of Fort Bliss, Biggs AAF, and other training areas, such as the South Training Areas, the Doña Ana Range–North Training Areas, and WSMR. Some activities associated with activities on McGregor Range have the potential to result in noise impacts in these areas, as well.

At Biggs AAF, noise levels could increase either as a result of increased airlift support for expanded troop training or from direct mission support for expanded combat aviation training. However, none of these potential increases are expected to surpass the intensity of the surge of operations that would be associated with mobilization. The Noise Zone II and III areas associated with full mobilization operations do not impact current land uses, the potentially increased noise levels associated with expanded mission activity would not be considered significant.

Other mission activities include training in the training areas, aerial gunnery, air-to-ground training, and continued missile and artillery firing on other ranges. However, these activities remain sporadic, highly transient, and of relatively short duration. In general, aviation noise will continue to constitute the primary noise source in these areas. Although elevated noise levels do occur in some specific areas (e.g., directly at the target on air-to-ground ranges, in artillery impact areas, etc.) no excessive noise levels extend beyond range boundaries. Therefore, no incompatible land uses result.

4.12.8 Mitigation

Since no significantly adverse noise impacts are expected to occur, no mitigations are required.

4.12.9 Irreversible and Irretrievable Commitment of Resources

No irreversible or irretrievable commitment of resources would occur.